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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,526	12/30/2003	Tao Li	030163	8867

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EXAMINER	
RADOSEVICH, STEVEN D	
ART UNIT	**PAPER NUMBER**
2117	

NOTIFICATION DATE	DELIVERY MODE
09/14/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/749,526	LI, TAO	
	Examiner	Art Unit	
	Steven D. Radosevich	2117	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☒ Claim(s) *9, 10, and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-23 are present within this instant examination.

Priority

Acknowledgment is made that no priority is claimed for this application and as such the filing date, 12/30/2003, is being used for this examination.

Response to Arguments

Applicant's arguments with respect to claim 1-23 have been considered but are moot in view of the new ground(s) of rejection. Applicant specifically argues on pages 6-7 that the cited prior art used in the previous office action "may not have been 'before the invention thereof by the applicant for patent,' as required" since the application date is December 30, 2003 (12/30/2003). However applicant is directed to pages 6-7 of the applicant's own arguments wherein the latest date of all the art used within the prior office action is before the applications filing date (12/30/2003) and therefore is applicable prior art. Specifically, the web site by Rahul Chauhan, cited by the examiner, and observed by the applicant indicates a latest date of 7/1/2003, which is prior to the application date of the application, making it prior art (see page 6-7 of applicant's arguments).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-12, 20, and 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 1, and 20, the functional relationship between the claim limitations is unclear. Specifically, it is unclear to the examiner if the "spread test date" is a second input to the demodulator that is also correlated with the plurality of codes (descrambled and/or despread) as the "input data" is, or as in claim 13, the "spread test data" is provided **as** the "input data," indicating a single input to the demodulator that is correlated with the plurality of codes (descrambled and/or despread). For the purposes of this examination the spread test data is being treated as being provided **as** the input data.

As per claims 3-12 and 22-23 these claims are dependent from claims 1 and 20 respectfully without overcoming the 35 U.S.C. 112, second paragraph issues and therefore also inherit the 35 U.S.C. 112, second paragraph issues and may not be given further consideration on their merits. Examiner notes the other dependent claims do overcome the 35 U.S.C. 112, second paragraph issues with a multiplexer.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 13-14, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Farine et al. (U.S. Publication 20020075945 A1, filed 11/28/2001 and published 6/20/2002).

1. As per claims 1, 13, and 20, Farine teaches a demodulator (6 in figure 1) configured to correlate an input data (IF in figure 1) with a plurality of codes (7 in figure 1); and a test data pattern generator (15 in figure 1) configured to form a spread test data (IF test in figure 1), and to provide the spread test data to the demodulator (output of 15 in 6 in figure 1).

2. As per claims 2, 14, and 21, Farine further teaches within figure 1 a multiplexer (16) to multiplex the input data (IF) and the spread test data (IF test) to the demodulator (6).

Claim Rejections - 35 USC § 103

Claim rejected under 35 U.S.C. 103(a) as being unpatentable over Farine et al. (U.S. Publication 20020075945 A1, filed 11/28/2001 and published 6/20/2002) as applied to claims 1, 13, and 20 above, and further in view of Mir et al (U.S. Patent 7123590 B2, patented 10/17/2006, published 9/23/2004, and filed 3/18/2003).

3. As per claims 3, 15, and 22, Farine teaches a demodulator, input data, test data pattern generator, spread test data, and correlating data with a plurality of codes as described above in detail as per claims 1, 13, and 20.

Farine does not specifically teach wherein at least one of the plurality of codes comprises a scrambling code and a spreading code.

However within an analogous art, Mir, it is clear that it was well know at the time the invention was made that demodulators receive and process data, for example by way of descrambling, despreading, and data demodulating, which requires a scrambling code and spreading code (see column 3 lines 61-66).

Therefore one of ordinary skill within the art at the time the invention was made could have been motivated to modify Farine to include both a scrambling code and spreading code as in Mir so as to allow reception and processing of data by a demodulator that both descrambles and despreads data such as was known and used at the time the invention was made.

Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farine et al. (U.S. Publication 20020075945 A1) as modified with Mir et al (U.S. Patent 7123590 B2) as applied to claim 3 and 15 above, and further in view of Rahul Chauhan (as sited on the 892 within this and past actions under non-patent documents).

4. As per claims 4 and 16, Farine as modified with Mir teaches a demodulator, input data, test data pattern generator, spread test data, and correlating data with a plurality of codes wherein at least one of the plurality of codes comprises a scrambling code and a spreading code as described above in detail as per claims 1 and 3, 13 and 15, and 20 and 22.

Farine as modified with Mir does not specifically teach wherein the scrambling code comprises a pseudo-random noise (PN) code and the spreading code comprises a Walsh code.

However within Mir, "CDMA standards such as W-CDMA, IS-95, IS-2000, IS-856, and so on" are taught (see column 3 lines 32-34). CDMA standards known at the time and therefore incorporated within Mir include IS-95A, IS-95B and CDMA-2000 such as taught within Rahul Chauhan. Within Rahul and the standards taught, a scrambling code comprising a pseudo-random noise (PN) code and a spreading code comprising a

Walsh code is taught (pages 8-11 in Rahul Chauhan under "A Walk Thought To IS-95A, IS-95B, CDMA-2000 And Call Processing") and therefore was well known and incorporated within Mir.

Therefore one of ordinary skill within the art at the time the invention was made could have been motivated to have the scrambling code comprises a pseudo-random noise (PN) code and the spreading code comprises a Walsh code since as taught within Rahul and therefore incorporated within Mir a scrambling code comprising a pseudo-random noise (PN) code and a spreading code comprising a Walsh code since such codes used in such a way were a well known, reliable, and used codes within CDMA standards.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farine as applied to claim 1 above, and further in view of Mailaender et al (U.S. Publication 20040001426 A1).

5. As per claim 11, Farine teaches a demodulator, input data, test data pattern generator, spread test data, and correlating data with a plurality of codes as described above in detail as per claim 1.

Farine does not specifically teach wherein the integrated circuit further comprises a plurality of spreaders configured to spread the input test data with the plurality of codes to form a plurality of spread test data.

However in an analogous art Mailaender teaches wherein a plurality of spreaders are configured to spread the input data with a plurality of codes to form a plurality of spread data (paragraph 0039 and figure 2).

Therefore one of ordinary skill within the art at the time the invention was made could have been motivated to incorporate a plurality of spreaders such as Mailaender teaches, configured to spread input data with a plurality of codes to form a plurality of spread test data within an integrated circuit such as taught by Farine since it would add security to the system such as indicated within Mailaender (paragraph 0039) and would also increase the range capability of the circuit.

Claims 5-6, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farine as modified with Mir as applied to claim 3, 11, and 15, and further in view of Bertin et al (U.S. Patent 6802033 B1).

6. As per claims 5, 6, 12, and 17 Farine as modified with Mir teaches a demodulator, input data, test data pattern generator, spread test data, and correlating data with a plurality of codes wherein at least one of the plurality of codes comprises a scrambling code and a spreading code as described as per claims 3, 15, and 11.

Farine as modified with Mir does not specifically teach wherein the integrate circuit further comprises a plurality of AND gates configured to gate off the scrambling code or spreading code.

However in an analogous art Bertin teaches wherein a plurality of AND gates are used to gate off or select specific circuitry and codes within an integrated circuit (columns 7-8 lines 65-9 and figure 6).

Therefore one of ordinary skill within the art at the time the invention was made could have been motivated to have AND gates such as Bertin teaches, to gate off the scrambling code or the spreading code within the integrated circuit taught within Farine

as modified with Mir since the use of AND gates in such a way would allow for selection and controllability of parameters as taught within Bertin (column 7-8 lines 65-1) within the integrated circuit required to correlate specific scrambling or spreading codes to a data from among the known plurality of codes.

Claims 7-8, 18, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farine as applied to claim 1, 13, and 20 above, and further in view of Hashem et al (U.S. Patent 7151944 B2, filed 9/27/2001).

7. As per claims 7-8, 18, and 23, Farine teaches a demodulator, input data, test data pattern generator, spread test data, and correlating data with a plurality of codes as described above in detail as per claims 1, 13, and 20.

Farine does not specifically teach the test pattern generator comprising a combiner configured to combine a plurality of scrambling codes and a plurality of spreading codes to form the plurality of codes.

However Farine does teach wherein the test signals (IF test in figure 1) have to be designed in the same way as the intermediate signals (column 7 lines 35-37), which indicates the test signals should be designed the same as the standard non test signals (IF in figure 1). Furthermore in an analogous art Hashem teaches scrambling codes and spreading codes may also be combined to distinguish multiple signals from a number of base stations (column 6 lines 37-56).

Therefore one of ordinary skill within the art at the time the invention was made could have been motivated to modify within Farine, the test pattern generator, to comprise a combiner to combine a plurality of scrambling codes and a plurality of

spreading codes so as to accurately generate test signals that are designed the same as standard non test signals (as taught within Farine column 7 lines 35-37) that distinguish multiple signals from a number of base stations (as taught within Hashem column 6 lines 37-56). Examiner notes a standard logic gate (such as an XOR) could be used as the combiner since those skilled in the art at the time the invention was made would recognize standard logic gates logically combine two or more signals reliably and predictably.

Allowable Subject Matter

Claims 9-10 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Radosevich whose telephone number is 571-272-2745. The examiner can normally be reached on 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques H. Louis can be reached on 571-272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cynthia Britt/
Primary Examiner
Art Unit 2117
9/6/07

Steven D. Radosevich
Examiner
Art Unit 2117